

AMENDED CLAIMS

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claims 1 to 29 replaced with amended claims 1 to 29 (6 pages)]

- 5 1. A process for the treatment of at least one thin
brittle metal strip (1, 21a, 21b, 30) having a
thickness of less than 0.1 mm, comprising at least
one step in which the thin strip (1, 21a, 21b,
21c, 30) is subjected to stresses, characterized
10 in that, prior to the step of the process in which
the thin strip (1, 21a, 21b, 21c, 30) is subjected
to stresses, at least one side of the strip is
covered with a coating layer (3, 3', 13, 13', 31)
made of at least one polymer film so as to obtain,
15 on the strip, an adhesive layer having a thickness
of between 1 and 100 μ m, modifying the deformation
and fracture properties of the thin metal strip,
and in that the step of the process in which the
thin strip is subjected to stresses is carried out
20 on the strip covered with the coating layer.
2. The process as claimed in claim 1, characterized
in that the coating layer (3, 3') made of at least
one polymer film consists of a self-adhering
25 plastic film precoated with adhesive.
3. The process as claimed in claim 2, characterized
in that the self-adhering plastic film precoated
with adhesive comprises a layer of a pressure-
30 sensitive self-adhering substance and in that the
self-adhering coating layer (3, 3') is made to
adhere to the thin metal strip (1) by pressing the
coating layer (3, 3') onto the thin metal strip
(1).
- 35 4. The process as claimed in either of claims 2
and 3, characterized in that the plastic film

consists of one of the following materials:
polyester, polytetrafluoroethylene, polyimide.

5. The process as claimed in any one of claims 2 to
4, characterized in that one side of the thin
brittle metal strip (1) is brought into contact
with a first self-adhering polymer film (3), the
nanocrystalline strip (1) thus being able to be
handled, in that the second side of the thin
brittle metal strip (1) is brought into contact
with a second film (3') made of a self-adhering
plastic, in that pressure is applied to the
laminated strip (6) consisting of the thin brittle
metal strip (1) between the two films of polymer
material (3, 3') and in that a mechanical
operation, for example a cutting operation, is
carried out on the laminated strip (6).

6. The process as claimed in any one of claims 2 to
4, characterized in that a plurality of laminated
strips (6, 7a, 7b, 7c) each having a coating layer
consisting of a plastic film precoated with a
pressure-sensitive adhesive on at least one of its
sides are produced, in that the plurality of
laminated strips (6, 7a, 7b, 7c) are superposed
and joined together by adhesion in order to obtain
a laminated composite strip (11) and in that a
mechanical operation, for example a cutting
operation, is carried out on the laminated
composite strip (11).

7. The process as claimed in any one of claims 2
to 6, characterized in that the pressure-sensitive
adhesive substance of the self-adhering plastic
film precoated with adhesive is a crosslinkable
substance and in that a crosslinking heat
treatment is carried out on the coating layer
adhering to the thin metal strip.

8. The process as claimed in claim 1, characterized in that the coating layer comprising at least one polymer film consists of a thermoplastic non-self-adhering polymer film precoated with adhesive on one of its faces, in that such a thermoplastic film precoated with adhesive is brought into contact with at least one of the sides of the thin metal strip (1) in order to obtain a laminated strip (7a, 7b, 7c), in that a plurality of laminated strips (7a, 7b, 7c) are manufactured in this way, in that the plurality of laminated strips (7a, 7b, 7c) are heated to a temperature of less than 400°C, in that the strips of the plurality of laminated strips (7a, 7b, 7c) heated to obtain a composite laminated strip (11) are superimposed and compressed one against another, and in that a process step involving stresses, such as a cutting operation, is carried out on the composite laminated strip (11).

9. The process as claimed in claim 8, characterized in that the thermoplastic film is made of one of the following polymer materials: polyethylene modified by acrylic acid or maleic anhydride; grafted polypropylene; polyamide; polyurethane

10. The process as claimed in claim 1, characterized in that the coating layer comprising at least one polymer film consists of a reactive adhesive polymer material, in that the coating layer is deposited on at least one of the sides of the thin brittle metal strip (1), in order to obtain a laminated strip (16), in that a plurality of laminated strips (16a, 16b, 16c) is produced in this way, in that the laminated strips (16a, 16b, 16c) are heated to a temperature of less than 400°C, in that the laminated strips (16a, 16b,